

software application, can be used to determine whether the software application is validly installed on the target computer.

The validation actions can comprise any number of different actions, each of which can be specifically tailored to its associated software application. Indeed, the validation actions include activities such as executing a program or library module associated with the software application and/or comparing various aspects of the software application and target computer environment, each of which provides results that can be used to determine whether the software application is installed validly and correctly. The validation actions may also include information for installing the software application validly onto the target computer.

Unlike simply determining whether a particular file is corrupted or not, the present invention provides flexibility to look at a variety of aspects related to whether or not a software application is validly installed. Moreover, comparisons may involve more than simply a pure equivalence, which is required when a hash value is generated for a data file and compared to a previous value. Indeed, comparisons may include less than, greater than, equal to, or a combination of them all.

Summary of Ferchau

Ferchau purportedly discloses a portable cryptographic device that holds security logic that, when executed with regard to a data file on a computer, generates a resultant validation value. The resultant validation value is then compared to a previously generated validation value to determine whether or not the data file has been compromised. The device also may store a list of data files to be validation as well as previously generated validation values for the data files.

While Ferchau purportedly can determine whether or not a particular file has been compromised, Ferchau fails to disclose a validation manifest describing validation actions, which validation actions, when executed, provide results for determining whether or not a software application is validly installed on a target computer.

The Claims Distinguished

The Office Action rejected Claims 1-49 as being anticipated by Ferchau. For the following reasons, applicants respectfully disagree and assert that the pending claims are in condition for allowance.

Claim 1

As a preliminary point, applicants submit that validating whether a software application is properly installed is patentably distinguishable from validating the integrity of a data file. As pointed out in the specification, and as those skilled in the art will appreciate, a software application may not be validly installed even when the validity/integrity of the software application's files can be assured. As just one example, if a key component of a software application is moved to an incorrect folder, the software application will cease functioning. In this circumstance, it is irrelevant whether or not the integrity of the component has been compromised. If the component cannot be located in its proper place, the software application is not validly installed. Clearly, determining the integrity of a file (i.e., that it has not been corrupted), as purportedly disclosed by Ferchau, is not the functional equivalent to determining whether a software application is properly installed on a target computer.

In addition to the inapplicability of Ferchau to the pending claims, applicants further submit that Ferchau fails to disclose the following elements of Claim 1:

**obtaining a validation manifest associated with the software application, the validation manifest comprising validation actions for determining whether the software application is properly installed on the target computer; and
executing the validation actions in the validation manifest.** (Emphasis added.)

In regard to "a validation manifest associated with the software application," applicants assert that while the portable cryptographic device described in Ferchau may include a list of files to be checked for corruption, the device and its list of files are not associated with the software application. In contrast, as disclosed in the specification, page 7, line 16, typically, the

validation manifest is provided with the software application in order to ensure proper installation. Nothing in Ferchau discloses that the list of files on the portable cryptographic device bears an association with determining whether a software application is properly installed on a target computer.

The Office Action cites to Ferchau, paragraph [0048], as disclosing a list of files and equates this list of files to a validation manifest. Further, the Office Action cites to Ferchau, paragraph [0080], as disclosing software verification values corresponding to data files and equates these verification values as validation actions. Assuming that the elements of Claim 1 can be reasonably construed according to the Office Action's assertions, which applicants expressly reject, the application of these assertions breaks down in view of the following element, i.e., "executing the validation actions in the validation manifest." Clearly, previously saved validation values are not "**validation actions**" that can be executed. The validation values are clearly identified as results of actions, not actions. Moreover, Ferchau explicitly states that the security logic is executed, not the validation values. Still further, Ferchau discloses that after executing the security logic on a data file, the resultant value is compared to a stored validation value. In sum, applicants assert that the validation values cited in Ferchau, paragraph [0080], cannot be reasonably construed as validation actions which can be executed to determine whether the software application is properly installed on the target computer," as recited in Claim 1.

It is well established that "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). As described above, applicants submit that Ferchau fails to disclose each and every element of Claim 1, and in particular that Ferchau fails to disclose at least (a) a validation manifest associated with a software application, (b) that the validation manifest

comprises validation actions for determining whether the software application is properly installed, and (c) executing the validation actions to determine whether the software application is properly installed.

As Ferchau fails to disclose each and every element of Claim 1, applicants submit that Claim 1 is in condition for allowance. Accordingly, applicants request that the 35 U.S.C. § 102(b) rejection of Claim 1 be withdrawn, and the claim allowed.

Claims 2-12

Claims 2-12 depend from independent Claim 1. As Claim 1 is in condition for allowance, applicants submit that dependent Claims 2-12 are also in condition for allowance and request that the 35 U.S.C. § 102(b) rejections be withdrawn, and the claims allowed.

In addition to depending from Claim 1, these claims include additional elements that further distinguish them from Ferchau, some of which are discussed below.

Claim 2

Claim 2 recites that one of the validation actions in the validation manifest is the execution of **"a validation program associated with the software application."** In contrast, Ferchau purportedly discloses a security program that is entirely unrelated to the software application. Indeed, it would appear that this independence is maintained in order to ensure the integrity of the security program. Thus, Ferchau's security program is independent of the data files that it validates, without any disclosure of **"a validation program associated with the software application."**

For this additional reason, applicants submit that Claim 2 is in condition for allowance and request that the 35 U.S.C. § 102(b) rejection of Claim 2 be withdrawn, and the claim allowed.

Claim 3

Claim 3 recites that one of the validation actions in the validation manifest is the execution of "a validation routine in a loadable module associated with the software application." As already mentioned above, the security program on the portable cryptographic device is entirely independent and unrelated to the software application. Since Ferchau's security program is independent of the content that it validates, Ferchau clearly fails to disclose "a validation routine in a loadable module **associated with the software application.**"

For this additional reason, applicants submit that Claim 3 is in condition for allowance and request that the 35 U.S.C. § 102(b) rejection of Claim 3 be withdrawn, and the claim allowed.

Claims 5-10

Each of Claims 5-10 recite comparing explicitly identified values in order to determine whether or not the software application is validly installed. Ferchau purportedly discloses that a security program/logic **generates** a software verification value and compares the verification value to a previously generated verification value. Moreover, the Office Action cites to various paragraphs pointing to how Ferchau may include a file size, a file date, and the like, in generating a resultant verification value. However, applicants submit that using these values to generate a verification value is entirely distinct from comparing the values directly.

Generating a verification value using a file size creates something other than a file size that is later compared. However, in the present invention, a comparison to a file size is important as the comparison may not be directed to merely an equivalence. Instead, the comparison may be directed to determining whether a file is under a maximum size, or that the modification date for a file does not exceed a particular date. Still further, a comparison may be valid if the version number is equal or greater to a value in the validation manifest. Clearly, it can be very important that the values (file size, date, version number, registry value, etc.) are compared explicitly, and

not hashed into a resultant verification value that is compared for equivalence to a previously generated verification value.

Ferchau discloses using various aspects (with others) in generating a verification value for a particular file that is compared for equivalence to a previously generated verification value. Ferchau fails to disclose explicitly comparing certain values of certain aspects of a software installation, as recited in Claims 5-10. Moreover, as described above, comparisons of explicit values is important as a valid comparison could very likely be based on something other than mere equivalence.

For the additional reasons described above, applicants submit that Claims 5-10 are in condition for allowance and request that the 35 U.S.C. § 102(b) rejection of these claims be withdrawn, and the claims allowed.

Claim 11

Applicants submit that Ferchau fails to disclose that the list of files on the portable cryptographic device (equated by the Office Action as the validation manifest) includes "installation information for installing the software application onto the target computer," as recited in Claim 11.

The Office Action cites to a Ferchau, Claim 18, stating the "the software verification value is generated in response to detecting an install of the data file," as disclosing installation information for installing the software application onto the target computer. Applicants submit that this passage of Ferchau cannot be reasonably construed as disclosing "installation information for installing the software application onto the target computer."

Indeed, the only reasonable interpretation of this passage of Ferchau is that some agent detects the installation of a data file on the computer. When this occurs, the agent causes the Ferchau security logic to generate a verification value. As discussed above, this verification value is subsequently used in a comparison to verify the integrity of the data file. In short, this

passage of Ferchau discloses that a data file is installed. Clearly, this is not "installation information **for** installing the software application onto the target computer."

Applicants further point out that the "installation information for installing the software application onto the target computer" is recited as being part of the validation actions included in the validation manifest. Nothing in Ferchau discloses that the list of data files (which the Office Action identified as the equivalent of a validation manifest) includes information for an agent to detect that a data file is installed. Such an assertion is entirely unsupportable.

For these additional reasons, applicants submit that Claim 11 is in condition for allowance and request that the 35 U.S.C. § 102(b) rejection of Claim 11 be withdrawn, and the claim allowed.

Claims 13-24

Claims 13-24, while of different scope and coverage, were rejected for the same reasons as described above in regard to Claims 1-12. Accordingly, for the reasons discussed above, applicants assert that Claims 13-24 are in condition for allowance and request that the 35 U.S.C. § 102(b) rejections be withdrawn, and the claims allowed.

Claims 25-36

Claims 25-36, while of different scope and coverage, were rejected for the same reasons as described above in regard to Claims 1-12. Accordingly, for the reasons discussed above, applicants assert that Claims 25-36 are in condition for allowance and request that the 35 U.S.C. § 102(b) rejections be withdrawn, and the claims allowed.

Claims 37-48

Claims 37-48, while of different scope and coverage, were rejected for the same reasons as described above in regard to Claims 1-12. Accordingly, for the reasons discussed above, applicants assert that Claims 37-48 are in condition for allowance and request that the 35 U.S.C. § 102(b) rejections be withdrawn, and the claims allowed.

Claim 49

The Office Action asserts that the disclosure of Ferchau applies to a plurality of software applications and is rejected for the reasons set forth in regard to Claim 1. Applicants respectfully assert that the rationale behind the rejection of Claim 1 is less plausible to the rejection of Claim 49.

Applicants assert that Ferchau fails to disclose the following elements of Claim 49:

identifying a plurality of software applications installed on the target computer;
and

for each identified software application:

obtaining a validation manifest associated with the software application,
the validation manifest comprising validation actions for determining
whether the software application is properly installed on the target computer;
and

executing the validation actions in the validation manifest.

Assuming the rationale of Claim 1, Ferchau purportedly discloses a list of files stored on a portable cryptographic device which the Office Action equates, functionally, to a validation manifest. However, nothing in Ferchau discloses "**identifying a plurality of software applications installed on the target computer,**" as recited in Claim 49, and the Office Action fails to cite where in Ferchau there is a disclosure of identifying the software applications installed on the target computer. Ferchau, at most, discloses that the device includes a list of data files.

The rationale of the rejection of Claim 1 further breaks apart in regard to the elements recited under "for each identified software application," which clearly indicates that the following elements are executed for each identified software application.

The first element of the "for each" clause is to obtain "**a validation manifest associated with the software application, the validation manifest comprising validation actions** for determining whether the software application is properly installed on the target computer." In

regard to the rationale of the rejection of Claim 1, the list of files is the manifest, not a list of files for obtaining manifests. Indeed, nothing in Ferchau discloses obtaining a manifest for each software application installed on the computer.

As discussed above, nothing in Ferchau discloses, for each manifest, **"executing the validation actions in the validation manifest."** Ferchau discloses that a user may direct the validation of a data file, but entirely fails to disclose executing the validation actions in each validation manifest corresponding to each software application identified as being installed on the target computer.

As Ferchau fails to disclose each and every element of Claim 49, applicants submit that Claim 49 is in condition for allowance. Accordingly, applicants respectfully request that the 35 U.S.C. § 102(b) rejection of Claim 49 be withdrawn, and the claim allowed.

Conclusion

In view of the above remarks, applicants respectfully submit that the present application is in condition for allowance. Reconsideration and reexamination of the application, and allowance of the claims at an early date, are solicited. If the Examiner has any questions or comments concerning the foregoing response, the Examiner is invited to contact the applicants' undersigned attorney at the number below.

Respectfully submitted,

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